**1. Search string**

**Web of Science**

TITLE- learn\* OR educat\* OR teach\* OR train\* AND universit\* OR college\* OR higher education AND headset\* OR HMD\* OR head-mounted display\* OR immersive VR OR immersive virtual realit\* OR immersive technolog\*

AND

ABSTRACT-empirical OR quantitative OR experimental OR hypothesis OR experiential

ABSTRACT-NOT rehabilitation OR therapy OR disorder

Refined by:

Research areas-educational research

Language-English or Chinese

Publication years 2017-2023

Document types-article

Open access

**Scopes**

TITLE-learn\* OR educat\* OR teach\* OR train\* AND universit\* OR college\* OR higher education AND headset\* OR hmd\* OR head-mounted display\* OR immersive OR vr OR immersive virtual realit\* OR immersive technolog\*

AND

( LIMIT-TO ( OA , "all" ) ) AND ( LIMIT-TO ( PUBYEAR , 2023 ) OR LIMIT-TO ( PUBYEAR , 2022 ) OR LIMIT-TO ( PUBYEAR , 2021 ) OR LIMIT-TO ( PUBYEAR , 2020 ) OR LIMIT-TO ( PUBYEAR , 2019 ) OR LIMIT-TO ( PUBYEAR , 2018 ) OR LIMIT-TO ( PUBYEAR , 2017 ) ) AND ( LIMIT-TO ( DOCTYPE , "ar" ) ) AND ( LIMIT-TO ( LANGUAGE , "English" ) OR LIMIT-TO ( LANGUAGE , "Chinese" ) )

**Google Scholar**

In TOTLE

|  |  |  |
| --- | --- | --- |
| Learn (and the following round by changing into educat, teach, train) | University (and the following rounds by changing into higher education, college) | Headset |
| HMDs |
| Head-mounted displays |
| Immersive VR |
| Immersive technology |
| Immersive virtual reality |

In total 72 times searching on google scholar (4\*3\*6).

**2. Inclusion and exclusion**

Table. Inclusion and exclusion

|  |  |
| --- | --- |
| Inclusion | Exclusion |
| Randomized controlled trial (RCT) or quasi-experimental study | Single group non-comparative studies |
| Studies used test or task performance as a dependent variable | Studies only measured learning experiences in academic emotion aspects, e.g., perceived ease of learning, flow, engagement, enjoyment, motivation |
| Studies provided sufficient information on the IVR application features, learning tasks, and learning activities | Studies that did not provide sufficient data to extract information on aspects of technological and pedagogical affordances |
| Peer-reviewed journal articles from 2017 to 2023 | Dissertations, conferences articles, book chapters, technical report |
| In English and Chinese | In Other languages |
| Educational use of fully immersive VR with a headset conducted in the field of higher education | VR be used as a rehabilitation tool |